

## LINCOLN/LANCASTER COUNTY PLANNING STAFF REPORT

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### for March 31, 2004 PLANNING COMMISSION MEETING

This is a combined staff report for related items. This report contains a single background and analysis section for all items.

**P.A.S.:** Change of Zone #04018 - Flood Plain  
Misc # 04001 - Amendments to Subdivision  
Misc # 04002 - Amendments to Design Standards

**PROPOSAL:** Text amendments to :

*Zoning, Title 27 LMC;*

- Chapter 27.03, General Definition
- Chapter 27.52, Flood Regulations for Existing Urban Areas
- Chapter 27.53, Flood Regulations for New Growth Areas
- Chapter 27.55, Flood Plain District
- Chapter 27.65, Community Unit Plan
- Chapter 27.81. General Provisions

*Subdivision, Title 26 LMC;*

- Chapter 26.07, Definitions
- Chapter 26.15, Preliminary Plat
- Chapter 26.23, Development Standards
- Chapter 26.24, Flood Regulations for Existing Urban Areas
- Chapter 26.25, Flood Regulations for New Growth Areas
- Chapter 26.27, Minimum Improvements

*Lincoln Design Standards for Zoning and Subdivision Regulations;*

- Section 2.05, Stormwater Drainage Design Standards for Subdivision Regulations
- Section 2.07, Flood Design Standards for New Growth Areas for Subdivision Regulations
- Section 3.06, Minimum Flood Corridor Design Standards for Zoning Regulations
- Section 3.07, Flood Design Standards for New Growth Areas for Zoning Regulations

*Drainage Criteria Manual;*

- Chapter 1, Introduction
- Chapter 10, Flood Design Criteria for New Growth Areas

All relating to the flood plain regulations to reflect the April 2003 report and recommendations of the Mayor's Floodplain Task Force for the City of Lincoln New Growth Areas (see attached map, text and supporting documentation ).

A Comprehensive Plan amendment (CPA # 04017) is also in process to reflect the Task Force principles and policy objective and update referenced language.

**CONCLUSION:** These amendments modify the existing ordinances and standards to reflect the Mayor's Flood Plain Task Force report of April 2003. These amendments only apply to the "New Growth Areas" of Lincoln's three mile jurisdiction. The Subdivision and Zoning are adjusted to have both an Existing Urban Area and a New Growth Areas, thus the existing city regulations stay essentially the same and only the defined New Growth areas are effected. The Design Standards and Drainage Criteria are amended reflect these changes.

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| <b>RECOMMENDATION:</b> |
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| Approval of attached text |
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**HISTORY:**

**August 2001** - Former Mayor Wesely appointed the Mayor's Floodplain Task Force.

**April 2003** - The Task Force finalized recommendations for New Growth Areas and the Existing Urban Area and produced their final report.

**ANALYSIS:**

1. The Mayor's Floodplain Task Force recommendations for floodplain standards are summarized below:

1. Adopt No Adverse Impact Policy
2. Improve Accuracy of Floodplain Maps
3. Adopt New Floodplain Standards
4. Provide Flexibility for Stream Crossings
5. Apply Stream Buffers to Mapped Floodplains and Smaller Streams
6. Preserve Flood Storage on Surplus Property
7. Develop a Floodplain Buyout Program
8. Do **Not** Charge Floodplain Development Fee
9. Encourage Best Management Practices

10. Take Action Regarding Salt Creek Floodplain Through Lincoln (N/A for New Growth Areas)
  11. Encourage Higher Building Construction Standards
  12. Protect Lateral Additions to Non-Residential Structures
  13. Provide Incentives for Cluster Development
  14. Use Best Available Floodplain Study Information
  15. Improve Floodplain Disclosure in Real Estate Transactions
  16. Improve Methods for Assessing Floodplain Properties
2. The proposed Flood Regulations and Standards apply to New Growth Areas within Lincoln's jurisdiction (see map).
  3. These include revisions to multiple documents, including Lincoln Zoning and Subdivision Ordinances, Design Standards, and Drainage Criteria Manual.
  4. The regulations use best available flood hazard information - standards apply to FEMA-mapped floodplains as well as 'floodprone areas' identified through watershed master plans.
  5. The proposal adopts a 'No Net Rise' standard, technically requiring a hydraulic study to show no rise greater than 0.05' in the 100-year floodplain (outside the floodway) or floodprone areas.

Exceptions:

- a. Residential non-substantial improvements
  - b. Stream crossing structures meeting sequencing standards for minimizing and mitigating impacts
  - c. Minor projects with No Rise Certification (require no study)
  - d. Approved Preliminary Plats
  - e. Public Stream Crossing structures having approved EIS, etc. or design public hearing as of adoption of standards
  - f. Dams & stormwater storage facilities
6. The proposal requires compensatory storage for development in floodplain or floodprone area so that flood storage lost to fill or structures is compensated for by providing replacement storage at 1 to 1 ratio.

Exceptions: Same as above; stream crossing structures do not have to replace lost storage

7. This proposal extends requirement for preservation of buffer called 'Minimum Flood Corridor' to stream channels with mapped floodplains. Today the buffer is only required outside mapped floodplains. Total buffer width is 60' (30' per side) plus 6x depth of stream.

Exceptions:

Operations and Maintenance, channel improvements, stormwater storage, public parks, trails, other public recreational uses allowed to encroach with impacts to storage and vegetation mitigated at a 1.5 to 1 ratio.

Stream crossing structures - not required to replace lost storage or vegetation at 1.5 to 1 ratio, but must re-vegetate graded areas wherever possible.

8. This proposal requires all lateral additions to non-residential structures to be protected to flood standards and to meet 'no net rise' and 'compensatory storage' requirements.
9. This includes revisions to clarify ordinance provisions required by minimum federal and state standards, for administrative purposes, and for consistency between different sections of the code.
10. This package recommends and provides some incentives for additional (voluntary) flood management standards -- 'best management practices' and 'best construction practices' to offset impacts to the natural and beneficial functions of floodplains and floodprone areas during site development. Density bonuses in the Community Unit Plan are added to the "R" districts as well as the current AG and AGR districts for floodplain preservation [see 27.65.020 (f)].
11. A Comprehensive Plan amendment is also in process, in tandem with this application.
12. These proposed amendments reflect and implement the recommendations of the Floodplain Task Force.

Prepared by:

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Planner  
March 15, 2004

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# CITY OF LINCOLN NEBRASKA

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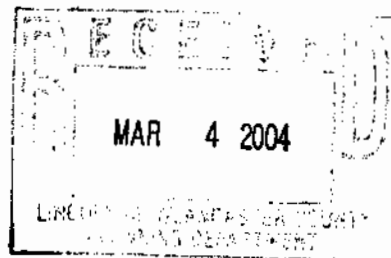
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March 4, 2004

Marvin Krout, Director  
Lincoln-Lancaster County Planning Dept.  
555 S. 10th Street  
Lincoln, NE 68508



Dear Marvin:

Attached are proposed flood standards for New Growth Areas for consideration by the Planning Commission at their March 31, 2004 public hearing. These standards are proposed by the Public Works and Utilities Department and Lower Platte South Natural Resources District. The flood standards are intended to reflect the April 2003 recommendations of the Mayor's Floodplain Task Force for the City of Lincoln New Growth Areas (see attached).

Amendments are proposed to five different documents:

1. Lincoln - Lancaster County Comprehensive Plan
2. Lincoln Zoning Ordinance
3. Lincoln Subdivision Ordinance
4. Lincoln Design Standards
5. Lincoln Drainage Criteria Manual

A summary of the proposed amendments is provided in the attached documentation. The **principles and policy objectives** included in the proposed Comprehensive Plan amendment **apply both to the City and County**. *The ordinances and standards apply only to New Growth Areas within Lincoln's 3-mile zoning jurisdiction (see attached map)*. New Growth Areas are defined as those areas outside the Lincoln city limits and zoned AG Agriculture or AGR Agricultural Residential as of the effective date of the standards. The Existing Urban Area is intended to be addressed in a second phase following the adoption of standards for New Growth Areas.

## ORDINANCE TEXT REVISIONS

The flood standards for the **Subdivision Ordinance** have been consolidated from multiple chapters into two chapters dedicated to flood standards: one for the Existing Urban Area and one for New Growth Areas. The **Zoning Ordinance** was revised by eliminating Chapter 27.55, "Floodplain District," and creating two new chapters to distinguish between standards for the Existing Urban Area and New Growth Areas. Because all text within new chapters is underlined, new or revised standards within these chapters are distinguished by **highlighted** text. Thus, text which is not highlighted in Chapters 27.52 and 27.53 of the draft

# LINCOLN

The Community of Opportunity

Zoning Ordinance, and 26.24 and 26.25 of the draft Subdivision Ordinance represents existing standards. In addition to the recommendations of the Mayor's Floodplain Task Force, **some revisions have been made with applications to both Existing Urban Area and New Growth Areas** to clarify ordinance provisions required by minimum federal and state standards, for administrative purposes, and for consistency between different sections of the code.

### **BACKGROUND**

In August of 2001, former Mayor Wesely appointed the Mayor's Floodplain Task Force (FPTF), representing a range of stakeholders from the community, to formulate recommendations regarding the development of new floodplain standards. The Task Force utilized the results of two studies in developing their recommendations, one completed by the Corps of Engineers (COE), and a second completed by Camp Dresser & McKee, Inc. (CDM). **Executive summaries for these studies from Appendix H of the FPTF Report are attached for reference.**

#### ***Corps of Engineers Study***

The COE study evaluated three scenarios on the Dead Man's Run and Beal Slough floodplains, from moderate to more extreme losses of flood storage. **The study concluded that, within the study reaches, increased flood damages** resulting from loss of flood storage had the potential to range from **\$2.6 to \$10.9 million on Dead Man's Run**, and from **\$0.1 to \$1.9 million on Beal Slough**. Economic analysis was not performed for **100% loss of flood storage**, which showed a substantially greater rise in flood heights (2.8 foot rise and 4.3 foot rise on Deadman's Run and Beal Slough, respectively) than the alternative scenarios where the economic analysis was performed.

#### ***CDM Study***

The CDM study projected the **reduction in flood damage possible to public infrastructure if higher standards were adopted** and the economic costs to private development of meeting a higher standard. Half-foot Rise and No Net Rise/Compensatory Storage standards were evaluated. Under the No Net Rise/Compensatory Storage standard, as compared to the current One-foot Rise standard, flood damage costs to public buildings, streets and stream crossings were projected to be reduced 27% and 44%, respectively. **Reduction in flood damage costs based on a No-Rise/Compensatory Storage scenario were projected at 100%, 27% and 44% for public buildings, streets, and stream crossing structures, respectively.**

The CDM study's evaluation of the **increased costs to private development** to meet a No Rise/Compensatory Storage standard were projected at **14%, 21% and 10% for traditional residential, commercial and industrial development configurations, respectively. For cluster developments** allowed by the ordinance today through Community Unit Plans and Planned Unit Developments, the No Net Rise/Compensatory Storage standard was projected to **increase costs to private development by 6% or less**. Additional information regarding estimated engineering costs from Appendix K from the FPTF Report is attached for reference.

### ***Task Force Final Report***

In April of 2003, the FPTF finalized their recommendations, distinguishing between New Growth Areas and the Existing Urban Area. A copy of the recommendations for New Growth Areas is attached, and a copy of the full FPTF report is available on the City's website at [lincoln.ne.gov](http://lincoln.ne.gov). The flood standards as proposed are intended to reflect the recommendations of the FPTF for New Growth Areas for the City of Lincoln.

### **PUBLIC INFORMATION REGARDING DRAFT STANDARDS**

The draft standards were made available for public review on February 4, 2004. A notice was sent to approximately 475 individuals and organizations with a summary and information regarding where a full set of standards could be obtained. A set of draft standards was also forwarded to Planning Commission members and elected officials. Since that time, the proposed standards have been available for review at the following locations:

- Lincoln City Libraries
- City-County Planning Department
- Public Works & Utilities Dept.
- Lower Platte South NRD
- Kinkos at 48th & Vine (for fee)
- City of Lincoln Website: [lincoln.ne.gov](http://lincoln.ne.gov) (as of Feb 18)

**Presentations regarding the proposed standards have been made to the following organizations:**

- Mayor's Environmental Advisory Committee - February 5, 2004
- Mayor's Neighborhood Roundtable - February 12, 2004
- Architects/Engineers Seminar - February 18, 2004
- County Ecological Advisory Committee - March 2, 2004

**Presentations are scheduled prior to the March 31 public hearing, as follows:**

- Open House at County Extension Offices - March 9, 2004, 5:30-8:00 pm
- Homebuilders, Board of Realtors, and Chamber of Commerce - March 9, 2004
- Planning Commission Briefing - March 17, 2004

### **Contacts for questions regarding the proposed standards are as follows:**

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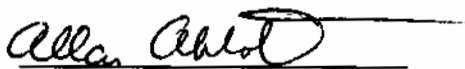
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The proposed standards reflect the recommendations of a 16-member Floodplain Task Force representing a broad cross-section of interests throughout the community, and they represent approximately 2 ½ years of technical study and consideration. The standards are consistent with the Lincoln-Lancaster County Land Use Plan and support the goals of the Comprehensive Plan regarding the reduction of future flood hazards and the conservation of floodplain functions and riparian corridors for flood storage and conveyance, stream stability, and water quality.

Sincerely,



Allan Abbott, Director  
Public Works & Utilities Dept.



Glenn Johnson, General Manager  
Lower Platte South NRD

***cc (w/o attachments):***

Mayor Coleen J. Seng  
Nicole Fleck-Tooze, Ben Higgins, Rock Krzycki - PW/U Dept.  
Mike Merwick, John Callen - Building & Safety Dept.

***Attachments:***

Appendix H of the FPTF Report - Executive Summaries for COE and CDM Studies  
Appendix K of the FPTF Report - Supporting Information (engineering costs)  
Summary of Proposed Standards  
Map showing Existing Urban Area and New Growth Areas for Flood Regulations  
FPTF Recommendations for New Growth Areas  
List of Revisions  
Amendments to Comprehensive Plan  
Revisions to Lincoln Zoning Ordinance  
Revisions to Lincoln Subdivision Ordinance  
Revisions to Lincoln Design Standards  
Revisions to Lincoln Drainage Criteria Manual

## **Draft Flood Standards Revisions for New Growth Areas**

### ***List of Revisions***

#### **Comprehensive Plan**

- F34-35, Future Conditions - Community Form, Plan Assumptions Section, Page 1
- F63, Future Conditions - Environmental Resources, Floodplain Section, Page 2
- F78-80, Future Conditions - Utilities, Floodplain Management Section, Page 2

#### **Title 26, Lincoln Subdivision Ordinance**

- Chapter 26.07, "Definitions", Page 6
- Chapter 26.15, "Preliminary Plat", Page 12
- Chapter 26.23, "Development Standards", Page 18
- Chapter 26.24, "Flood Regulations for Existing Urban Area", Page 27
- Chapter 26.25, "Flood Regulations for New Growth Areas", Page 31
- Chapter 26.27, "Minimum Improvements", Page 37

#### **Title 27, Lincoln Zoning Ordinance**

- Chapter 27.03, "General Definitions", Page 41
- Chapter 27.52, "Flood Regulations for Existing Urban Area", Page 54
- Chapter 27.53, "Flood Regulations for New Growth Areas", Page 65
- Chapter 27.55, "Flood Plain District", Page 80
- Chapter 27.65, "Community Unit Plan", Page 90
- Chapter 27.81, "General Provisions", Page 98

#### **Lincoln Design Standards for Zoning and Subdivision Regulations**

- Section 2.05, "Stormwater Drainage Design Standards" for Subdivision Regulations, Page 103
- Section 2.07, "Flood Design Standards for New Growth Areas" for Subdivision Regulations, Page 115
- Section 3.06, "Minimum Flood Corridor Design Standards" for Zoning Regulations, Page 116
- Section 3.07, "Flood Design Standards for New Growth Areas" for Zoning Regulations, Page 117

#### **Drainage Criteria Manual**

- Chapter 1, "Introduction", Page 118
- Chapter 10, "Flood Design Criteria for New Growth Areas", Page 132